ACRONYMS AND ABBREVIATIONS

A	Acceleration; Area; Target Presented Area
A_0	Main Lobe Amplitude
A_1	First Side Lobe Amplitude
A_2	Second Side Lobe Amplitude
AAA	Antiaircraft Artillery
AC	Alternating Current
AGC	Automatic Gain Control
AGCREF	Automatic Gain Control Reference Voltage
AGCSIG	Automatic Gain Control Control Voltage
AGL	Above Ground Level
ALARM	Advanced Low-Altitude Radar Model
AM	Amplitude Modulation
Amp	Amplitude
AMRL	Aerospace Medical Research Laboratory; Armament and Munition Research Laboratory
A_n	Amplitude
ANGLE	Off-Boresight Angle
ANOVA	Analysis of Variance
ASI	ASI Systems International, Inc.
ASP	Accreditation Support Package
avg	Average
Az	Azimuth
B	Ballistic Equation
β_{AP}	Aim Point Azimuth
BETA	Azimuth Angle Aiming Solution
BW	Receiver Bandwidth (Hz)
BTR	Burn-Through Range
C	Constant Value
c	Velocity of Light
CASE	Computer-Aided Software Engineering
CMS	Conceptual Model Specification
CONSCAN	Conical Scan
COSRO	Conical Scan on Receive Only
CPA	Closest Point of Approach
Δ	Magnitude Change
D	Distance; Diameter; Miss Distance
d	Round Diameter; Target Dimension
dB	Decibel
dBsm	Decibels per Square Meter
dBW	Decibels per Watt
DC	Direct Current
deg	Degree
DoD	Department of Defense
DRD	Data Requirements Dictionary
E_H	Expected Hits

E(s)	Gun Boresight Angle
ECCM	Electronic Counter Countermeasure
ECM	Electronic Countermeasure
El	Elevation
EM	Electromagnetic
EO	Electro-Optic
ESAMS	Enhanced Surface-to-Air Missile Simulation
F	Value for F-Distribution
f	Carrier Frequency; Constant Value; Fire Rate of One Gun (rounds/second)
F1	Operator Muzzle Velocity Control Parameter
FAT	Functional Area Template
F_C	Critical Value for F-Distribution
FCC	Fire-Control Computer
FE	Functional Element
f_e	Egress Frequency
FEAP	Functional Element Assessment Plan
FELR	Functional Element Level Sensitivity Ranking
f_i	Ingress Frequency
f_p	Aim Point Elevation
F_m	Value of F-Distribution for Means
FME	Foreign Material Exploitation
F_N	Noise Figure
F_v	Value of F-Distribution for Variances
FSTC	Foreign Science and Technology Center
G	Antenna Gain Factor
G_r	Antenna Gain
G(s)	Transfer Function Value
g	Acceleration of Gravity
GAIN0	Receiver Amplifier Gain
H	Horizontal Miss Distance
Hz	Hertz
IR	Infrared
J	Joule
J/S	Jammer-to-Signal Ratio
JTCG/AS	Joint Technical Coordinating Group for Aircraft Survivability
K	Constant Value; Kilo (x1000); Degrees Kelvin
K_0	Boltzmann Constant (1.3805E-23 J/k)
k	Kilo- (x 1000); Constant Value
$K_d(s)$	Drag Coefficient
λ	Wavelength
LCS	Local Coordinate System
L_t	Total Loss Factor
m	Meter; Round Mass
M/S	Modeling and Simulation

m/s	Meters per Second
MAP	Model Assessment Plan
MARS	Model Assessment Requirements Specification
MLR	Model Level Sensitivity Ranking
MOE	Measure of Effectiveness
MOP	Measure of Performance
μ	Microsecond
M_{pt}	Peak Value
mr	Milliradian
mrad	Milliradian
MTI	Moving Target Indicator
mW	Milliwatt
N	Number; Noise
N	Number of Rounds in Burst
n	Number
NRL	Naval Research Laboratory
N_s	Number of Rounds Fired per Scan
ns	Nanosecond
NSR	Normalized Sensitivity Ratio
nW	Nanowatt
OCR	Optical Character Recognition
OPCH	Optical Cross-Hair Tracking
OPSR	Optical Tracking with Speed Rings
P(s)	Fire-Control Aim Angle
p(t)	Superelevation Command
P_{cum}	Cumulative Hit Probability
P_d	Probability of Detection
PDF	Probability Density Function
PD^3	Post Development Design Document
P_{fa}	Probability of False Alarm
P_H, P_h	Probability of Hit
PHI	Elevation Angle Aiming Solution
P_k	Probability of Kill
P_{miss}	Probability that All Rounds Missed
P_N	Thermal Noise
PNOISA	Parametric Noise - Acquisition
PNOIST	Parametric Noise - Tracking
POC	Point of Contact
PPI	Plan Position Indicator
P_r	Radar Peak Power Output
PRF	Pulse Repetition Frequency
PRI	Pulse Repetition Interval
pW	Picowatt
Pwr	Power
R	Range; Radius of Circle Approximation of Presented Area of Ellipsoid
ρ	Air Density
R	Radius
RADGUNS	Radar-Directed Gun System Simulation

RCS	Radar Cross Section
RF	Radio Frequency
RG	Range
Rg	Measured Range
RG_{det}	Detection Range
RGWO	Range Gate Walk-Off
R_i	Indirect Path Length
R_{max}	Maximum Allowable Rest Duration; Maximum Detection Range
R_{min}	Minimum Allowable Rest Duration
RMS	Root-Mean-Square
R_P	Radius of Projectile
RPTR	Simple Repeater
R_T	Radius of Uncertainty
R_t	True Range
R_u	Unambiguous Target Range
s	Second; Round Velocity; Dispersion; Laplace Operator; Velocity
σ	Standard Deviation; RCS; Dispersion
σ^2	Variance
S/N	Signal-to-Noise Ratio
SAP	Sensitivity Analysis Plan
SAR	Sensitivity Analysis Report
SDD	Software Design Document
S_{est}	Estimated Round Velocity
SIG	Adjusted Voltage
SMART	Susceptibility Model Assessment and Range Test
S_{max}	Maximum Number of Rounds per Burst per Gun
SME	Subject Matter Expert
S_{min}	Minimum Number of Rounds per Burst per Gun
$(S/N)_{min}$	Minimum Signal-to-Noise Ratio
SNR_{AT}	Signal-to-Noise Ratio
SOW	Statement of Work
SP	Self-propelled
SPJ	Self-Protection Jamming
S&TI	Scientific and Technical Information
SV/T	Single Value per Test
SWA	Swept Audio
S	Summation
θ	Angle Magnitude
τ	Time Delay
t	Time; Value for Student's t-Distribution
T	IEEE Standard Temperature
TBD	To Be Determined
TEMP	Temperature
Tgt	Target
TOF	Time-of-Flight
T_p	Peak Time
t_p	Time to Reach Target
TPA	Target Presented Area
T_r	Rise Time
T_s	Settling Time

TSPI	Time, Space, and Position Information
TVA	Target Vulnerable Area
TWS	Track-While-Scan
UAV	Unmanned Aerial Vehicle
V	Input Range Error Signal; Vertical Miss Distance; Velocity
V	Volts
V&V	Verification and Validation
VAX	Virtual Access Extended Computer
VFT	Velocity False Target
VGWO	Velocity Gate Walk-Off
V_{IN}	Input Voltage
V_{OUT}	Output Voltage
VSR	Verification Source Report
V_r	Relative Velocity
VV&A/CM	Verification, Validation, Accreditation, and Configuration Management
W	Watt
ω	Angular Frequency
$\overline{X}$	Arithmetic Mean
z	Value for Normal Distribution
z_C	Critical Value for Mann-Whitney U test
z_U	Value for Mann-Whitney U test